

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-13. (Canceled)

14. (Currently Amended) A method for manufacturing a temperature sensor comprising the steps of:

forming at least one conductor track by a currentless deposition of a metal onto a surface of a carrier and by a subsequent thermal treatment, the carrier being a powder, which is composed of at least one of a metal oxide, a metal nitride and a metal carbide, and

connecting an evaluation device configured to measure and evaluate a temperature-dependent change in a resistance of the at least one conductor track to the at least one conductor track.

15. (Previously Presented) The method according to claim 14, wherein a layer thickness of a metal layer situated on the surface of the carrier is determined by at least one of a duration and a selected temperature during a thermal treatment.

16. (Canceled)

17. (Previously Presented) The method according to claim 14, wherein the temperature sensor is situated in a layer of a laminated layer sensor.

18. (Previously Presented) The method according to claim 14, wherein the carrier includes at least one of aluminum oxide and zirconium dioxide.

19. (Previously Presented) The method according to claim 14, wherein the metal includes at least one of cobalt, nickel, copper, and platinum.

20. (Previously Presented) The method according to claim 14, wherein palladium nuclei are used as seed crystals for the deposition.

21. (Previously Presented) The method according to claim 20, wherein the palladium nuclei are initially deposited by reduction.

22. (Previously Presented) The method according to claim 14, wherein the thermal treatment causes the deposited metal to diffuse into an inner core of the carrier to form a boundary layer.

23. (Currently Amended) The method according to claim 14, wherein the carrier includes adjacent particles, and the thermal treatment causes the adjacent particles of the carrier to fuse together in a region of the metal layer.

24. (Previously Presented) The method according to claim 14, further comprising:
loading the at least one conductor track with an alternating current voltage.